

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,058	09/26/2005	Shinji Kokuo	44471/313200	2835
JOHN S. PRATT, ESQ KILPATRICK STOCKTON, LLP 1100 PEACHTREE STREET ATLANTA, GA 30309		·	EXAMINER	
		•	LU, JIPING	
			ART UNIT	PAPER NUMBER
			3749	
	•			
			MAIL DATE	DELIVERY MODE
			09/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

•	Application No.	Applicant(s)				
	10/526,058	KOKUO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Jiping Lu	3749				
The MAILING DATE of this communication apperent of the Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
 Responsive to communication(s) filed on 10 August 2007. This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. 						
Disposition of Claims						
4) Claim(s) 1-6 is/are pending in the application. 4a) Of the above claim(s) 3-6 is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-3 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	4) Interview Summary (Paper No(s)/Mail Dat 5) Notice of Informal Pa	te				
Paper No(s)/Mail Date <u>2/28/05, 2/27/06</u> . 6) Other:						

Application/Control Number: 10/526,058 Page 2

Art Unit: 3749

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-3 in the reply filed on 8/10/07 is acknowledged.

2. Claims 4-6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made without traverse in the reply filed on 8/10/07.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnema et al. (U. S. pat. 5,857,262) in view of Flanagan (U. S. Pat. 4,130,388) or Gauthier et al. (U. S. Pat. 5,562,437).

Art Unit: 3749

Bonnema et al. shows a gas combustion type hair drier comprising a gas tank (not shown, col. 4, lines 38-52), a combustor 18 including a primary combustion chamber (within 15) combusting mixed gas with the fuel gas supplied from the gas tank and primary air, a blower 10 blowing off air, a power supply 7 rotating a motor 13 of the blower 10, an ignition device 21, 22 igniting the fuel gas, an ejector 25a that draws the primary air into a gas flow path which are arranged same as claimed. The combustor 18 has a tubular section with a substantially circular cross section which is disposed between the blower 10 and the outlet (at 1) and has a plurality of fins 15 that form air flow passages between an outer peripheral surface of the combustor and an inner peripheral surface of the casing 1. However, Bonnema et al. does not show a combustor including a secondary combustion chamber to which gases, resulting from combustion in the primary combustion chamber, and secondary air are supplied for combustion. Flanagan teaches a burner/combustor including a primary combustion chamber (at 19A) combusting mixed gas with the fuel gas 22 and primary air(from 25) and a secondary combustion chamber (at 13) to which gases, resulting from combustion in the primary combustion chamber, and the secondary air (from 26, 27, 15) are supplied for combustion. Gauthier et al. teaches a burner/combustor including a primary combustion chamber (at 9) combusting mixed gas with the fuel gas 8 and primary air 4 and a secondary combustion chamber (at 7) to which gases, resulting from combustion in the primary combustion chamber, and the secondary air 12 are supplied for combustion. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combustor of the hair drier of Bonnema et al. to include a secondary combustion chamber as taught by Flanagan or Gauthier et al. in order to more efficiently burn the fuel and obtain a complete combustion.

6. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnema et al. (U. S. pat. 5,857,262) in view of Flanagan (U. S. Pat. 4,130,388) or Gauthier et al. (U. S. Pat. 5,562,437) as applied to claim 1 above, and further in view of Akinobu (JP 2002-233416 or 2000-266409).

The hair drier of Bonnema et al. as modified by Flanagan or Gauthier et al as above includes all that is recited in claims 2-3 except for a plurality of recessed portions formed on an inner wall of the primary combustion chamber and extending in a fore and aft direction. Akinobu teaches a hair drier with a plurality of recessed portions formed on an inner wall of the primary combustion chamber and extending in fore and aft direction (see Figs. 4, 6, 8 of JP 2002-233416 and Fig. (b) of JP 2000-266409). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the primary combustion chamber of Bonnema et al. to include a plurality of recessed portions as taught by Akinobu in order to more efficiently guide air to the combustion chamber. For claim 3, see Fig. 3 of Bonnema et al. for gas straight movement restrictor (at 18).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEVEN B. MCALLISTER can be reached on 571 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/526,058

Art Unit: 3749

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jiping Lu

Primary Examiner

Art Unit 3749

J. L.